AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): Weldable component of structural steel, characterized in that its chemical composition comprises, by weight:

$$0.10\% \leq C \leq 0.22\%$$
$$0.50\% \leq Si \leq 1.50\%$$
$$Al \leq 0.9\%$$
$$0\% \leq Mn \leq 3\%$$
$$0\% \leq Ni \leq 5\%$$
$$0\% \leq Cr \leq 4\%$$
$$0\% \leq Cu \leq 1\%$$
$$0\% \leq Mo + W/2 \leq 1.5\%$$
$$0.0005\% \leq B \leq 0.010\%$$
$$N \leq 0.025\%$$

optionally at least one element selected from V, Nb, Ta, S and Ca, at contents of less than 0.3%, and/or from Ti and Zr at contents of less than or equal to 0.5%, the remainder being iron and impurities resulting from the production operation,
the contents of aluminium, boron, titanium and nitrogen, expressed in thousandths of %, of the composition also satisfying the following relationship:

$$B \geq \frac{1}{3} \times K + 0{,}5, \qquad (1)$$

with $K = \mathrm{Min}(I^* ; J^*)$

$I^* = \mathrm{Max}(0 ; I)$ and $J^* = \mathrm{Max}(0 ; J)$

$I = \mathrm{Min}\left(N ;\ N - 0{,}29(Ti - 5)\right)$

$$J = \mathrm{Min}\left(N \ ; 0{,}5\left(N - 0{,}52\ Al + \sqrt{(N - 0{,}52\,Al)^2 + 283} \right) \right),$$

the contents of silicon and aluminium of the composition also complying with the following conditions:

if C > 0.145, then Si + Al < 0.95

and whose structure is bainitic, martensitic or martensitic-bainitic and also comprises from 3 to 20% of residual austenite.

2. (original): Steel component according to claim 1, characterized in that its chemical composition also satisfies the following relationship:

   1.1%Mn + 0.7%Ni+ 0.6%Cr + 1.5(%Mo + %W/2) ≥ 1 (2)

3. (original): Steel component according to claim 2, characterized also in that its chemical composition satisfies the following relationship:

   1.1%Mn + 0.7%Ni+ 0.6%Cr + 1.5(%Mo + %W/2) ≥ 2 (2)

4. (currently amended): Steel component according to claim 1,~~any one of claims 1 to 3,~~ characterized in that its chemical composition also satisfies the following relationship:

   %Cr + 3(%Mo + %W/2) ≥ 1.8.

5. (original): Steel component according to claim 4, characterized in that its chemical composition also satisfies the following relationship:

   %Cr + 3(%Mo + %W/2) ≥ 2.0.

6. (currently amended): Method for manufacturing a weldable steel component according to claim 1,~~any one of claims 1 to 5,~~ characterized in that

   - the component is austenitized by heating at a temperature of from Ac_3 to 1000°C, and it is then cooled to a temperature of less than or equal to 200°C, in such a manner that, at the core of the component, the rate of cooling between 800°C and 500°C is greater than or equal to the critical bainitic velocity,
   - optionally, tempering is effected at a temperature of less than or equal to Ac_1..

7. (original): Method according to claim 6, characterized in that, at the core of the component, the cooling rate between 500°C and a temperature of less than or equal to 200°C is from 0.07°C/s to 5°C/s .

8. (currently amended): Method according to claim 6,~~claim 6 or 7,~~ characterized in that tempering is effected at a temperature of less than 300°C for a period of time of less than 10 hours, at the end of the cooling operation to a temperature of less than or equal to 200°C.

9. (currently amended): Method according to claim 6,~~claim 6 or 7,~~ characterized in that no tempering is carried out at the end of the cooling operation to a temperature of less than or equal to 200°C.

10. (currently amended): Method for manufacturing a weldable steel plate according to claim 1,~~any one of claims 1 to 5,~~ the thickness of which is from 3 mm to 150 mm, characterized in that the plate is quenched, the cooling rate V_R at the core of the component between 800°C and 500°C and the composition of the steel being such that:

$$1.1\%Mn + 0.7\%Ni + 0.6\%Cr + 1.5(\%Mo + \%W/2) + \log V_R \geq 5.5.$$

11. (original): Method for manufacturing a weldable steel plate according to claim 10, the thickness of which is from 3 mm to 150 mm, characterized, in addition, in that the plate is quenched, the cooling rate V_R at the core of the component between 800°C and 500°C and the composition of the steel being such that:

$$1.1\%Mn + 0.7\%Ni + 0.6\%Cr + 1.5(\%Mo + \%W/2) + \log V_R \geq 6.$$